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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,137	04/23/2004	Roger A. Naylor SR.	3885.00	7430

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EXAMINER

LEY, FRANCISCO M

ART UNIT	PAPER NUMBER
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3709

MAIL DATE	DELIVERY MODE
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08/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/830,137

Applicant(s)

NAYLOR ET AL.

Examiner

Francisco M. Ley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/23/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (U.S. Patent 1,741,748) in view of MacDonald, Jr. et al. (U.S. Patent 4,561,203 hereinafter, MacDonald).

Claims 1, 5: White discloses an illuminated display having a base 10; a pair of waveguides 15 being abutted end-to-end and being supported by base 10 with the bottoms of the waveguides being positioned within the base 10 at flange 14 (Page 1, Lines 46-47). A strip 16 is included that is sandwiched between waveguides 15 and a pair of light sources are positioned within the base adjacent the bottoms of the waveguides and each being adapted for selective energization so as to illuminate a respective one of the waveguides. The light sources consist of the different openings 17 in the light-controlling member 12 that allow lamp 11 to successively illuminate waveguides 15.

White does not disclose that strip 16 is a mirrored strip. However, MacDonald discloses an illuminated sign 8 with a mirror surface reflector strip 32 that may be formed of a metallic film such as aluminum foil (Column 4, Lines 47-50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the illuminated sign of White to include a mirrored strip as disclosed by MacDonald. This would allow each waveguide 15 to be illuminated not only by the illumination source but also by any light that is reflected from the mirrored strip (See MacDonald Column 4, Lines 55-61).

Claim 6: White discloses that strip 16 between waveguides 15 prevents light from being transmitted from one waveguide to the other (Lines 58-61).

3. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (U.S. Patent 1,741,748) and MacDonald (U.S. Patent 4,561,203) in view of Wing (U.S. Patent 1,965,063).

Claim 2: The combination of White and MacDonald does not disclose that each of the waveguides is provided with a recessed arrow pointing away from a mirrored strip. However, Wing provides an illuminated display sign 5 that is provided with oppositely disposed arrows 12 and 13.

It would have been obvious at the time the invention was made to modify White and MacDonald to include arrows, as disclosed by Wing, on the waveguides and pointing away from the mirrored strip. This would allow illumination of the arrows to provide a directional signal (See Wing, Lines 4-9).

Claim 3: The combination of White and MacDonald does not disclose that the periphery of each of the waveguides and each recessed arrow is frosted. However,

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Wing discloses a frosted cover 10 that outlines casing 8 and directional arrows 12 and 13 (Lines 41-44).

It would have been obvious at the time the invention was made to modify White and MacDonald to include a periphery that is frosted, as disclosed by Wing. This would allow signals surrounded by the frosted perimeter to be distinguishable on an illuminated sign, which is the case with arrows 12 and 13 disclosed by Wing.

Claim 4: White and Macdonald do not disclose arrows including a triangular inner part surrounded by a triangular outer part formed of parallel linear segments. However, Wing discloses arrows in Figures 1 and 2 having triangular inner and outer tips that are formed of linear segments that are parallel to one another.

It would have been obvious at the time the invention was made to modify White and MacDonald to include the particular triangular arrows as disclosed by Wing. This allows the passage of light through the arrow shapes to be distinguished from the frosted perimeter to provide illumination of the arrows, as is done by Wing.

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (U.S. Patent 1,741,748) and MacDonald (U.S. Patent 4,561,203) in view of Woodruff (U.S. Patent 7,065,910).

Claim 7: White and MacDonald do not disclose light sources that are LEDs specifically. However, Woodruff discloses an illuminated sign that has LEDs 104 for selective illumination.

Claim 8: White and MacDonald do not disclose a transformer or a 3-position switch. However, Woodruff discloses a 3-position switch 108 for selectively

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energization of either none of the LEDs, a top row of LEDs, or a bottom row of LEDs (Column 8, Lines 16-20). Woodruff also discloses that a transformer may be attached to the light sources (Column 5, Lines 45-48).

It would have been obvious at the time the invention was made to modify White and MacDonald to include LEDs, a transformer, and a three-position switch as disclosed by Woodruff. LEDs are an obvious substitute to the lamp disclosed by White, as White states that, "any type of lamp may be employed" (Page 2, Lines 30-31). A transformer is an obvious addition for "transforming alternating current to direct current" (See Woodruff Column 5, Lines 46-47). A three-position switch would be an obvious addition to White, who states that "the sign may be changed by replacing the elements 15 by others bearing different letters or matter to be displayed" (Page 2, Lines 38-41). Therefore, it would be obvious to modify White to use the LEDs and three-position switch disclosed by Woodruff to illuminate a sign saying "open", "closed", or neither such as Woodruff does in Figure 6.

Claim 9: Neither White, MacDonald, or Woodruff discloses a three-position switch on a controller body remote from the sign base. However, such controller bodies for switches are well known in the art and would be an obvious addition to Woodruff, as this would allow a person to activate the sign from a distance.

5. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (U.S. Patent 1,741,748) in view of MacDonald (U.S. Patent 4,561,203), Wing (U.S. Patent 1,965,063), and Woodruff (U.S. Patent 1,965,063).

Claims 10, 11: The discussion of White in view of MacDonald as applied to claims 1, 5, and 6 is incorporated herein, as are the discussions of White and MacDonald in view of Wing as applied to claim 2, and in view of Woodruff as applied to claims 7-9.

White discloses an illuminated display having a base 10, a pair of waveguides 15 abutted end-to-end and supported by base 10 with the bottoms of the waveguides being positioned within the base 10 at flange 14 (Page 1, Lines 46-47). A strip 16 is included that is sandwiched between waveguides 15 and a pair of light sources are positioned within the base adjacent the bottoms of the waveguides and each being adapted for selective energization so as to illuminate a respective one of the waveguides. The light sources consist of the different openings 17 in the light-controlling member 12 that allow lamp 11 to successively illuminate waveguides 15.

MacDonald discloses a mirrored strip 32 for providing reflected illumination to a sign. Wing discloses an illuminated sign with recessed arrows pointing away from each other. Woodruff discloses a transformer for converting AC current to DC current, and also two rows of LEDs adapted for selective energization so as to illuminate either a top row or a bottom row through a three-position switch.

White does not disclose that the waveguides 15 are plastic. However, it would have been obvious at the time the invention was made to one of ordinary skill to modify White to use plastic instead of glass for the waveguides as this would allow possibly a lighter or cheaper material, but would essentially be merely a substitute transparent medium for light.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent Application Publication 2003/0222791 discloses a triangular warning light apparatus made of LEDs that operate in different modes via a three-position switch.
- U.S. Patent 6,023,869 discloses an illuminated sign with LEDs along a base providing illumination to different sections of a sign.
- Design Patents D248,424 and D310,176 disclose different types of basketball possession indicators.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francisco M. Ley whose telephone number is (571) 270-1299. The examiner can normally be reached on Monday-Friday, 8:30am-6:00pm, Alt Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jackson can be reached at (571) 272-4697. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call (800) 786-9199 (IN USA OR CANADA) or (571) 272-1000.

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July 30, 2007

GARY JACKSON
SUPERVISORY PATENT EXAMINER

